

Dragonostics 0001 sequence listing.txt SEQUENCE LISTING

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Dragonostics 0001 sequence listing.txt Ala Met Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Asn Asn Val Asp Gln 100 105 110 Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly Asp Gln Val Trp 115 120 125 Leu Gln Val Tyr Gly Glu Gly Glu Arg Asn Gly Leu Tyr Ala Asp Asn 130 135 140 Asp Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr His Asp Thr Asn 145 150 155 160 <210> <211> <212> 24 153 PRT <213> Homo sapiens <400> 24 Met Leu Leu Gly Ala Val Leu Leu Leu Leu Ala Leu Pro Gly His 1 10 15 Asp Gln Glu Thr Thr Gln Gly Pro Gly Val Leu Leu Pro Leu Pro 20 25 30 Lys Gly Ala Cys Thr Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly 35 40 45 His Asn Gly Ala Pro Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu 50 55 60 Lys Gly Glu Lys Gly Asp Pro Gly Leu Ile Gly Pro Lys Gly Asp Ile 65 70 75 80 Gly Glu Thr Gly Val Pro Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly 85 90 95 Ile Gln Gly Arg Lys Gly Glu Pro Gly Glu Gly Ala Leu Leu Ser Pro 100 105 110 Thr Cys Pro Phe Ala Leu Pro Arg Ser Ser Thr Ile Ser Lys Thr Thr 115 120 125 Met Met Ala Pro Leu Val Asn Ser Thr Ala Thr Phe Leu Gly Cys Thr 130 140 Thr Leu Pro Thr Thr Ser Gln Ser Ile 145 <210> <211> 166 <212> PRT <213> Homo sapiens

Page 18

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Met Leu Leu Leu Gly Ala Val Leu Leu Leu Leu Ala Leu Pro Gly His 1 10 15

Asp Gln Glu Thr Thr Gln Gly Pro Gly Val Leu Leu Pro Leu Pro 20 25 30

Lys Gly Ala Cys Thr Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly 35 40 45

His Asn Gly Ala Pro Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu 50 55 60

Lys Gly Glu Lys Gly Asp Pro Gly Leu Ile Gly Pro Lys Gly Asp Ile 65 70 75 80

Gly Glu Thr Gly Val Pro Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly 85 90 95

Ile Gln Gly Arg Lys Gly Glu Pro Gly Glu Gly Ala Tyr Val Tyr Arg 100 105 110

Ser Ala Phe Ser Val Gly Leu Glu Thr Tyr Val Thr Ile Pro Asn Met 115 120 125

Pro Ile Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp 130 135 140

Gly Ser Thr Gly Lys Phe His Cys Asn Ile Pro Gly Leu Tyr Leu His 150 155 160

Arg Leu Ser Ser Leu Pro

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Ala Glu Asp Asp Val Thr Thr Glu Glu Leu Ala Pro Ala Leu Val 20 25 30

Pro Pro Pro Lys Gly Thr Cys Ala Gly Trp Met Ala Gly Ile Pro Gly 35 40 45

His Pro Gly His Asn Gly Thr Pro Gly Arg Asp Gly Arg Asp Gly Thr Page 19 Pro Gly Glu Lys Gly Glu Lys Gly Asp Ala Gly Leu Leu Gly Pro Lys 65 70 75 80 Gly Glu Thr Gly Asp Val Gly Met Thr Gly Ala Glu Gly Pro Arg Gly
85
90
95 Phe Pro Gly Thr Pro Gly Arg Lys Gly Glu Pro Gly Glu Ala Ala Tyr 100 105 Met Tyr Arg Ser Ala Phe Ser Val Gly Leu Glu Thr Arg Val Thr Val 115 120 125 Pro Asn Val Pro Ile Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn 130 135 140 His Tyr Asp Gly Ser Thr Gly Lys Phe Tyr Cys Asn Ile Pro Gly Leu 145 150 155 160 Tyr Tyr Phe Ser Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val 165 170 175 Ser Leu Phe Lys Lys Asp Lys Ala Val Leu Phe Thr Tyr Asp Gln Tyr 180 185 190 Gln Glu Lys Asn Val Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu 195 200 205 Glu Val Gly Asp Gln Val Trp Leu Gln Val Tyr Gly Asp Gly Asp His 210 215 220 Asn Gly Leu Tyr Ala Asp Asn Val Asn Asp Ser Thr Phe Thr Gly Phe 225 230 235 240 Leu Leu Tyr His Asp Thr Asn 245

<210>

Met Thr Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly Thr Pro Gly Arg
1 10 15

Lys Gly Glu Pro Gly Glu Ala Ala Tyr Val Tyr Arg Ser Ala Phe Ser 20 25 30

Val Gly Leu Glu Thr Arg Val Thr Val Pro Asn Val Pro Ile Arg Phe Page 20

²⁷ 160

PRT

Mus musculus

<400>

Thr Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp Gly Ser Thr Gly 50 60

Lys Phe Tyr Cys Asn Ile Pro Gly Leu Tyr Tyr Phe Ser Tyr His Ile 65 70 75 80

Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe Lys Lys Asp Lys 85 90 95

Ala Val Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Lys Asn Val Asp Gln
100 105 110

Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly Asp Gln Val Trp 115 120 125

Leu Gln Val Tyr Gly Asp Gly Asp His Asn Gly Leu Tyr Ala Asp Asn 130 135 140

Val Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr His Asp Thr Asn 145 150 155 160

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Met Leu Leu Gln Ala Leu Leu Phe Leu Leu Ile Leu Pro Ser His 1 10 15

Ala Glu Asp Asp Val Thr Thr Glu Glu Leu Ala Pro Ala Leu Val 20 25 30

Pro Pro Pro Lys Gly Thr Cys Ala Gly Trp Met Ala Gly Ile Pro Gly 35 40 45

His Pro Gly His Asn Gly Thr Pro Gly Arg Asp Gly Arg Asp Gly Thr 50 60

Pro Gly Glu Lys Gly Gly Lys Gly Asp Ala Gly Leu Leu Gly Pro Lys

Gly Glu Thr Gly Asp Val Gly Met Thr Gly Ala Glu Gly Pro Arg Gly
85
90
95

Phe Pro Gly Thr Pro Gly Arg Lys Gly Glu Pro Gly Glu Ala Ala Ser 100 105 110

Leu Phe Pro Met Tyr Pro Phe Ala Leu Leu Arg Ser Ser Thr Thr Asn Page 21

<210>

²⁸ 156

<212> PRT

<213> Mus musculus

Arg Ile Ile Met Thr Ala Ala Leu Ala Ser Ser Thr Ala Thr Phe Arg 130 135 140

Asp Ser Thr Thr Ser Leu Thr Thr Ser Arg Cys Thr 145 150 155

<210> <211> 29

169 PRT

Mus musculus

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Pro Pro Pro Lys Gly Thr Cys Ala Gly Trp Met Ala Gly Ile Pro Gly 35 40 45

His Pro Gly His Asn Gly Thr Pro Gly Arg Asp Gly Arg Asp Gly Thr 50 60

Pro Gly Glu Lys Gly Glu Lys Gly Asp Ala Gly Leu Leu Gly Pro Lys 65 70 75 80

Gly Glu Thr Gly Asp Val Gly Met Thr Gly Ala Glu Gly Pro Arg Gly
85
90
95

Phe Pro Gly Thr Pro Gly Arg Lys Gly Glu Pro Gly Glu Ala Ala Tyr 100 105 110

Val Tyr Arg Ser Ala Phe Ser Val Gly Leu Glu Thr Arg Val Thr Val 115 120 125

Pro Asn Val Pro Ile Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn 130 135 140

His Tyr Asp Gly Ser Thr Gly Lys Phe Tyr Cys Asn Ile Pro Gly Leu 145 150 155 160

Tyr Ile Tyr Trp Leu Ser Ser Leu Pro 165

<210> 30

76

<212> PRT

Mus musculus

<400> 30

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Ala Glu Asp Asp Val Thr Thr Glu Glu Leu Ala Pro Ala Leu Val 20 25 30

Pro Pro Pro Lys Gly Thr Cys Ala Gly Trp Met Ala Gly Ile Pro Gly 35 40 45

His Pro Gly His Ile Lys Ile Lys Phe Glu Gly His Pro Pro Gly Arg $50 \hspace{1.5cm} 55 \hspace{1.5cm} 60$

Leu Asn Cys Ala Lys Ile Trp His Phe Leu Gln Asp 65 70 75

- <210> <211> 31 117
- <212> **PRT**
- <213> Homo sapiens

<400>

Met Pro Ser Pro Gly Thr Val Cys Ser Leu Leu Leu Leu Gly Met Leu 10 15

Trp Leu Asp Leu Ala Met Ala Gly Ser Ser Phe Leu Ser Pro Glu His $20 \hspace{1cm} 25 \hspace{1cm} 30$

Gln Arg Val Gln Gln Arg Lys Glu Ser Lys Lys Pro Pro Ala Lys Leu 35 40 45

Gln Pro Arg Ala Leu Ala Gly Trp Leu Arg Pro Glu Asp Gly Gly Gln 50 60

Ala Glu Gly Ala Glu Asp Glu Leu Glu Val Arg Phe Asn Ala Pro Phe 65 70 75 80

Asp Val Gly Ile Lys Leu Ser Gly Val Gln Tyr Gln Gln His Ser Gln 85 90 95

Ala Leu Gly Lys Phe Leu Gln Asp Ile Leu Trp Glu Glu Ala Lys Glu 100 105 110

Ala Pro Ala Asp Lys 115

<210> 32

<211> 116

<213> Homo sapiens

<400> 32

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Dragonostics 0001 sequence listing.txt
Met Pro Ser Pro Gly Thr Val Cys Ser Leu Leu Leu Gly Met Leu 1 5 10 15
Trp Leu Asp Leu Ala Met Ala Gly Ser Ser Phe Leu Ser Pro Glu His
20 25 30
Gln Arg Val Gln Val Arg Pro Pro His Lys Ala Pro His Val Val Pro 35 40 45
Ala Leu Pro Leu Ser Asn Gln Leu Cys Asp Leu Glu Gln Gln Arg His 50 55 60
Trp Ala Ser Val Phe Ser Gln Ser Thr Lys Asp Ser Gly Ser Asp Leu 65 70 75 80
Thr Val Ser Gly Arg Thr Trp Gly Leu Arg Val Leu Asn Arg Leu Phe 85 90 95
Pro Pro Ser Ser Arg Glu Arg Ser Arg Arg Ser His Gln Pro Ser Cys 100 105 110
Ser Pro Glu Leu
115
<210>
<211>
        33
292
        PRT
<213>
        Homo sapiens
<400>
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Met Ala Phe Met Lys Lys Tyr Leu Leu Pro Ile Leu Gly Leu Phe Met 1 10 15

Ala Tyr Tyr Tyr Ser Ala Asn Glu Glu Phe Arg Pro Glu Met Leu 20 25 30

Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg
35 40 45

Glu Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val Thr 50 55 60

Ala Arg Ser Lys Glu Thr Leu Gln Lys Val Val Ser His Cys Leu Glu 65 70 75 80

Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met
85 90 95

Thr Phe Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met Gly Gly 100 105 110

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Dragonostics 0001 sequence listing.txt
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Leu Asp Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu Asn Leu

Phe His Asp Asp Ile His His Val Arg Lys Ser Met Glu Val Asn Phe

Leu Ser Tyr Val Val Leu Thr Val Ala Ala Leu Pro Met Leu Lys Gln 145 150 155 160

Ser Asn Gly Ser Ile Val Val Ser Ser Leu Ala Gly Lys Val Ala 165 170 175

Tyr Pro Met Val Ala Ala Tyr Ser Ala Ser Lys Phe Ala Leu Asp Gly 180 185

Phe Phe Ser Ser Ile Arg Lys Glu Tyr Ser Val Ser Arg Val Asn Val 195 200 205

Ser Ile Thr Leu Cys Val Leu Gly Leu Ile Asp Thr Glu Thr Ala Met 210 215 220

Lys Ala Val Ser Gly Ile Val His Met Gln Ala Ala Pro Lys Glu Glu 225 230 235 240

Cys Ala Leu Glu Ile Ile Lys Gly Gly Ala Leu Arg Gln Glu Glu Val 245 250 255

Tyr Tyr Asp Ser Ser Leu Trp Thr Thr Leu Leu Ile Arg Asn Pro Cys 260 265 270

Arg Lys Ile Leu Glu Phe Leu Tyr Ser Thr Ser Tyr Asn Met Asp Arg 275 280 285

Phe Ile Asn Lys

<210> 34

<211> 163

<212> PRT <213> Homo sapiens

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Xaa can be any naturally occuring amino acid

<400>

Met Ala Phe Met Lys Lys Tyr Leu Leu Pro Ile Leu Gly Leu Phe Met 1 10 15

Ala Tyr Tyr Tyr Ser Ala Asn Glu Glu Phe Arg Pro Glu Met Leu Page 25

Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg 40 Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val Thr Ala Ser Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met Thr Phe 80 Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met Gly Gly Leu Asp 90 Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu Asn Leu Phe His Ala Ala Ala Leu Pro Met Leu Lys Gln Ser Asn Gly Ser Met Cys Ala Leu Leu Glu Cys Tyr His Val Val His Leu 160 Ser Ser Ser Xaa

<400> 35

Met Ala Phe Met Lys Lys Tyr Leu Leu Pro Ile Leu Gly Leu Phe Met $1 \hspace{1cm} 10 \hspace{1cm} 15$

Ala Tyr Tyr Tyr Ser Ala Asn Glu Glu Phe Arg Pro Glu Met Leu 20 25 30

Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg 35 40 45

Glu Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val Thr 50 55 60

Ala Arg Ser Lys Glu Thr Leu Gln Lys Val Val Ser His Cys Leu Glu 65 70 75 80

Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met Page 26

<210> 35 <211> 295

<212> PRT

<213> Homo sapiens

Thr Phe Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met Gly Gly 100 105

Leu Asp Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu Asn Leu 115 120 125

Phe His Asp Asp Ile His His Val Arg Lys Ser Met Glu Val Asn Phe 130 140

Leu Ser Tyr Val Val Leu Thr Val Ala Ala Leu Pro Met Leu Lys Gln 145 150 155 160

Ser Asn Gly Ser Ile Val Val Val Ser Ser Leu Ala Gly Lys Val Ala 165 170 175

Tyr Pro Met Val Ala Ala Tyr Ser Ala Ser Lys Phe Ala Leu Asp Gly
180 185 190

Phe Phe Ser Ser Ile Arg Lys Glu Tyr Ser Val Ser Arg Val Asn Val 195 200 205

Ser Ile Thr Leu Cys Val Leu Gly Leu Ile Asp Thr Glu Thr Ala Met 210 215 220

Lys Ala Val Ser Gly Ile Val His Met Gln Ala Ala Pro Lys Glu Glu 225 230 235 240

Cys Ala Leu Glu Ile Ile Lys Gly Gly Ala Leu Arg Gln Glu Glu Val 245 250 255

Tyr Tyr Asp Ser Ser Leu Trp Thr Thr Leu Leu Ile Arg Asn Pro Cys 260 265 270

Arg Lys Ile Leu Glu Phe Leu Tyr Ser Thr Ser Tyr Asn Met Glu Gly 275 280 285

Leu Phe Cys Leu Met Phe Ile 290 295

<210> 36 274

<211> <212> **PRT**

Homo sapiens

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Ala Tyr Tyr Tyr Ser Ala Asn Glu Glu Phe Arg Pro Glu Met Leu Page 27

Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg
35 40 45 Glu Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val Thr 50 55 60 Ala Arg Ser Lys Glu Thr Leu Gln Lys Val Val Ser His Cys Leu Glu 65 70 75 80 Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met
85 90 95 Thr Phe Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met Gly Gly 100 105 110 Leu Asp Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu Asn Leu 115 120 125 Phe His Asp Asp Ile His His Val Arg Pro Met Leu Lys Gln Ser Asn 130 140 Gly Ser Ile Val Val Ser Ser Leu Ala Gly Lys Val Ala Tyr Pro 145 150 155 160 Met Val Ala Ala Tyr Ser Ala Ser Lys Phe Ala Leu Asp Gly Phe Phe 165 170 175 Ser Ser Ile Arg Lys Glu Tyr Ser Val Ser Arg Val Asn Val Ser Ile 180 185 190 Thr Leu Cys Val Leu Gly Leu Ile Asp Thr Glu Thr Ala Met Lys Ala 195 200 205 Val Ser Gly Ile Val His Met Gln Ala Ala Pro Lys Glu Glu Cys Ala 210 215 220 Leu Glu Ile Ile Lys Gly Gly Ala Leu Arg Gln Glu Glu Val Tyr Tyr 225 230 235 240 Asp Ser Ser Leu Trp Thr Thr Leu Leu Ile Arg Asn Pro Cys Arg Lys 245 250 255 Ile Leu Glu Phe Leu Tyr Ser Thr Ser Tyr Asn Met Asp Arg Phe Ile 260 265 270 Asn Lys

<210> 37

<211> 274

<213> Homo sapiens

<400> 37

Met Ala Phe Met Lys Lys Tyr Leu Leu Pro Ile Leu Gly Leu Phe Met $1 \hspace{1cm} 10 \hspace{1cm} 15$

Ala Tyr Tyr Tyr Ser Ala Asn Glu Glu Phe Arg Pro Glu Met Leu 20 25 30

Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg 40 45

Glu Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val Thr 50 55 60

Ala Ser Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met Thr Phe 65 70 75 80

Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met Gly Gly Leu Asp 85 90 95

Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu Asn Leu Phe His $100 \hspace{1cm} 105 \hspace{1cm} 110$

Asp Asp Ile His His Val Arg Lys Ser Met Glu Val Asn Phe Leu Ser 115 120 125

Tyr Val Val Leu Thr Val Ala Ala Leu Pro Met Leu Lys Gln Ser Asn 130 135 140

Gly Ser Ile Val Val Ser Ser Leu Ala Gly Lys Val Ala Tyr Pro 145 150 155 160

Met Val Ala Ala Tyr Ser Ala Ser Lys Phe Ala Leu Asp Gly Phe Phe 165 170 175

Ser Ser Ile Arg Lys Glu Tyr Ser Val Ser Arg Val Asn Val Ser Ile 180 185 190

Thr Leu Cys Val Leu Gly Leu Ile Asp Thr Glu Thr Ala Met Lys Ala 195 200 205

Val Ser Gly Ile Val His Met Gln Ala Ala Pro Lys Glu Glu Cys Ala 210 215 220

Leu Glu Ile Ile Lys Gly Gly Ala Leu Arg Gln Glu Glu Val Tyr Tyr 225 230 235 240 Dragonostics 0001 sequence listing.txt
Asp Ser Ser Leu Trp Thr Thr Leu Leu Ile Arg Asn Pro Cys Arg Lys
245 250 255

Ile Leu Glu Phe Leu Tyr Ser Thr Ser Tyr Asn Met Asp Arg Phe Ile 260 265 270

Asn Lys

<210> 38

<211> <212> 262

PRT

Homo sapiens

<400> 38

Met Leu Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile 5 10 15

(

Gly Arg Glu Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val 20 25 30

Val Thr Ala Arg Ser Lys Glu Thr Leu Gln Lys Val Val Ser His Cys
35 40 45

Leu Glu Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu 50 60

Asp Met Thr Phe Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met 65 70 75 80

Gly Gly Leu Asp Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu 85 90 95

Asn Leu Phe His Asp Asp Ile His His Val Arg Lys Ser Met Glu Val 100 105 110

Asn Phe Leu Ser Tyr Val Val Leu Thr Val Ala Ala Leu Pro Met Leu 115 120 125

Lys Gln Ser Asn Gly Ser Ile Val Val Ser Ser Leu Ala Gly Lys 130 140

Val Ala Tyr Pro Met Val Ala Ala Tyr Ser Ala Ser Lys Phe Ala Leu 145 150 155 160

Asp Gly Phe Phe Ser Ser Ile Arg Lys Glu Tyr Ser Val Ser Arg Val 165 170 175

Asn Val Ser Ile Thr Leu Cys Val Leu Gly Leu Ile Asp Thr Glu Thr 180 185 190

Dragonostics 0001 sequence listing.txt
Ala Met Lys Ala Val Ser Gly Ile Val His Met Gln Ala Ala Pro Lys
195 200 205 Glu Glu Cys Ala Leu Glu Ile Ile Lys Gly Gly Ala Leu Arg Gln Glu 210 220 Glu Val Tyr Tyr Asp Ser Ser Leu Trp Thr Thr Leu Leu Ile Arg Asn 225 230 235 Pro Cys Arg Lys Ile Leu Glu Phe Leu Tyr Ser Thr Ser Tyr Asn Met 245 250 255 Asp Arg Phe Ile Asn Lys 260 <210> <211> 39 244 **PRT** Homo sapiens <400> Met Ala Phe Met Lys Lys Tyr Leu Leu Pro Ile Leu Gly Leu Phe Met $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$ Ala Tyr Tyr Tyr Ser Ala Asn Glu Glu Phe Arg Pro Glu Met Leu 20 25 30 Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg 35 40 45 Glu Met Ala Tyr His Leu Ala Lys Met Gly Ala His Val Val Thr 50 55 60 Ala Arg Ser Lys Glu Thr Leu Gln Lys Val Val Ser His Cys Leu Glu 65 70 75 80 Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met
85 90 95 Thr Phe Ala Glu Gln Phe Val Ala Gln Ala Gly Lys Leu Met Gly Gly 100 105 110 Leu Asp Met Leu Ile Leu Asn His Ile Thr Asn Thr Ser Leu Asn Leu 115 120 125 Phe His Asp Asp Ile His His Val Arg Lys Ser Met Glu Val Asn Phe 130 135 140 Leu Ser Tyr Val Val Leu Thr Val Ala Ala Leu Pro Met Leu Lys Gln 145 150 155 160 Dragonostics 0001 sequence listing.txt Ser Asn Gly Ser Ile Val Val Val Ser Ser Leu Ala Glu Thr Ala Met 165 170 175 Lys Ala Val Ser Gly Ile Val His Met Gln Ala Ala Pro Lys Glu Glu 180 185 190 Cys Ala Leu Glu Ile Ile Lys Gly Gly Ala Leu Arg Gln Glu Glu Val 195 200 205 Tyr Tyr Asp Ser Ser Leu Trp Thr Thr Leu Leu Ile Arg Asn Pro Cys 210 220 Arg Lys Ile Leu Glu Phe Leu Tyr Ser Thr Ser Tyr Asn Met Asp Arg 225 230 235 240 Phe Ile Asn Lys <210> 40 <211> 292 **PRT** <213> Mus musculus <400> Met Ala Val Met Lys Asn Tyr Leu Leu Pro Ile Leu Val Leu Phe Leu 1 10 15 Ala Tyr Tyr Tyr Ser Thr Asn Glu Glu Phe Arg Pro Glu Met Leu 20 25 30 Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg 35 40 45 Glu Met Ala Tyr His Leu Ser Lys Met Gly Ala His Val Val Leu Thr 50 60 Ala Arg Ser Glu Glu Gly Leu Gln Lys Val Val Ser Arg Cys Leu Glu 65 70 75 80 Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met
85 90 95 Thr Phe Ala Glu Gln Phe Ile Val Lys Ala Gly Lys Leu Met Gly Gly 100 105 110 Leu Asp Met Leu Ile Leu Asn His Ile Thr Gln Thr Ser Leu Ser Leu 115 120 125 Phe His Asp Asp Ile His Ser Val Arg Arg Val Met Glu Val Asn Phe 130 135 140

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Dragonostics 0001 sequence listing.txt
Leu Ser Tyr Val Val Met Ser Thr Ala Ala Leu Pro Met Leu Lys Gln
145 150 155 160
Ser Asn Gly Ser Ile Ala Val Ile Ser Ser Leu Ala Gly Lys Met Thr
165 170 175
Gln Pro Met Ile Ala Pro Tyr Ser Ala Ser Lys Phe Ala Leu Asp Gly
180 185 190
Phe Phe Ser Thr Ile Arg Thr Glu Leu Tyr Ile Thr Lys Val Asn Val
195 200 205
    Ile Thr Leu Cys Val Leu Gly Leu Ile Asp Thr Glu Thr Ala Met 210 220
Lys Glu Ile Ser Gly Ile Ile Asn Ala Gln Ala Ser Pro Lys Glu Glu
225 230 235 240
Cys Ala Leu Glu Ile Ile Lys Gly Thr Ala Leu Arg Lys Ser Glu Val
245 250 255
Tyr Tyr Asp Lys Ser Pro Leu Thr Pro Ile Leu Leu Gly Asn Pro Gly 260 265 270
Arg Lys Ile Met Glu Phe Phe Ser Leu Arg Tyr Tyr Asn Lys Asp Met 275 280 285
Phe Val Ser Asn
     290
<211>
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        PRT
        Mus musculus
<400>
Met Ala Val Met Lys Asn Tyr Leu Leu Pro Ile Leu Val Leu Phe Leu 1 10 15
Ala Tyr Tyr Tyr Ser Thr Asn Glu Glu Phe Arg Leu Gln Lys Val
20 25 30
Val Ser Arg Cys Leu Glu Leu Gly Ala Ala Ser Ala His Tyr Ile Ala
35 40 45
Gly Thr Met Glu Asp Met Thr Phe Ala Glu Gln Phe Ile Val Lys Ala 50 60
Gly Lys Leu Met Gly Gly Leu Asp Met Leu Ile Leu Asn His Ile Thr 65 70 75 80
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Dragonostics 0001 sequence listing.txt
Gln Thr Ser Leu Ser Leu Phe His Asp Asp Ile His Ser Val Arg Arg
85 90 95 Val Met Glu Val Asn Phe Leu Ser Tyr Val Val Met Ser Thr Ala Ala 100 105 110 Leu Pro Met Leu Lys Gln Ser Asn Gly Ser Ile Ala Val Ile Ser Ser 115 120 125 Leu Ala Gly Lys Met Thr Gln Pro Met Ile Ala Pro Tyr Ser Ala Ser 130 135 140 Lys Phe Ala Leu Asp Gly Phe Phe Ser Thr Ile Arg Thr Glu Leu Tyr 145 150 155 160Ile Thr Lys Val Asn Val Ser Ile Thr Leu Cys Val Leu Gly Leu Ile 165 170 175 Asp Thr Glu Thr Ala Met Lys Glu Ile Ser Gly Ile Ile Asn Ala Gln 180 185 Ala Ser Pro Lys Glu Glu Cys Ala Leu Glu Ile Ile Lys Gly Thr Ala 195 200 205 Leu Arg Lys Ser Glu Val Tyr Tyr Asp Lys Ser Pro Leu Thr Pro Ile 210 215 220 Leu Leu Gly Asn Pro Gly Arg Lys Ile Met Glu Phe Phe Ser Leu Arg 225 230 235 240 Tyr Tyr Asn Lys Asp Met Phe Val Ser Asn 245 <210> <211> 42 192 <212> PRT Mus musculus <213> <400> Met Ala Val Met Lys Asn Tyr Leu Leu Pro Ile Leu Val Leu Phe Leu $10 ext{1}$ 15Ala Tyr Tyr Tyr Ser Thr Asn Glu Glu Phe Arg Pro Glu Met Leu 20 25 30 Gln Gly Lys Lys Val Ile Val Thr Gly Ala Ser Lys Gly Ile Gly Arg 35 40 45 Glu Met Ala Tyr His Leu Ser Lys Met Gly Ala His Val Val Leu Thr 50 60

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Dragonostics 0001 sequence listing.txt
Ala Arg Ser Glu Glu Gly Leu Gln Lys Val Val Ser Arg Cys Leu Glu
65 70 75 80

Leu Gly Ala Ala Ser Ala His Tyr Ile Ala Gly Thr Met Glu Asp Met 85 90 95

Thr Phe Ala Glu Gln Phe Ile Val Lys Ala Gly Lys Leu Met Gly Gly 100 105 110

Leu Asp Met Leu Ile Leu Asn His Ile Thr Gln Thr Ser Leu Ser Leu 115 120 125

Phe His Asp Asp Ile His Ser Val Arg Arg Val Met Glu Val Asn Phe 130 140

Leu Ser Tyr Val Val Met Ser Thr Ala Ala Leu Pro Met Leu Lys Gln 145 150 155 160

Ser Asn Gly Ser Ile Ala Val Ile Ser Ser Leu Ala Gly Gly Arg Thr 165 170 175

Val Pro Gln Gln Arg Ser Arg Ser Val Thr Pro Asp Ser Arg Gly Pro 180 185 190